Manufacturing Information Systems Evaluation and Selection



Business Process Optimization

Software Implementation

First phase of IMEC's Manufacturing Information System Optimization Process

The decision to implement a new enterprise-wide manufacturing information system is not an easy one. It may stem from recognizing the shortcomings of the existing system or from proactively looking at future information requirements. Common attributes of an effective software system include:

- Increased system stability and reliability
- Reduced scrap and defects tracking
- Increased Sales/Order Entry efficiency
- Shop floor or work center data collection
- Reduced or eliminated human error
- Quality systems/ISO reporting requirements
- Reduced or eliminated non-value added steps
- Bar coding inventory
- Customer Just in Time (JIT) requirements
- Increased inventory accuracy
- Improved management reporting

- Increased product costing accuracy
- Automated work order generation
- Finished product tracking
- Increased production scheduling efficiency
- Maintenance scheduling
- Machine utilization tracking
- Fleet maintenance and scheduling
- Standardized work instructions and processes
- Reduced Work In Process (WIP)
- Electronic Data Interchange (EDI) requirements

IMEC uses a thorough, unbiased methodology in helping your company to identify, select, and implement an enterprise-wide manufacturing information system. Evaluation and Selection is the first step in IMEC's Manufacturing Information System Optimization process. Through this process, we work with your company to quantify your manufacturing information needs, evaluate and assess your current processes, and identify available manufacturing software packages that meet or exceed those needs.

Internal Commitment

Any successful Information Technology project, whether it is the installation of a new workstation or the implementation of a new manufacturing information system, requires the commitment of internal staff as well as access to timely, relevant, and factual information on available software choices. To develop this internal commitment, IMEC utilizes a company-wide needs assessment incorporating the information needs of your organization and quantifying any shortcomings of the existing information system as they pertain to each department within your company. Cooperatively, we will work with you to identify a cross-functional team to develop the purpose, objectives, scope, and expectations of a new system, and identify and prioritize your company's information system requirements.

Identifying potential manufacturing systems

To better understand your organization and its direction, IMEC will meet with your company's top management to determine its high-level informational and organizational needs. Then, IMEC will meet with the management and key personnel from all functional areas within the company. During these meetings we will quantify informational requirements of each area or department and discuss their effects on the entire organization. Following these meetings, IMEC will match your company's requirements with features available from the many available packages geared specifically towards your informational needs. We will present your company's internal team with an overview of compatible manufacturing information system packages that meet or exceed your organization's needs, along with the strengths and weaknesses of each as they compare to your quantified requirements.

Narrowing the options

IMEC works with your company to narrow the identified list of available manufacturing information systems down to a manageable number for further investigation. Vendor-provided system capabilities, initial capability research, past IMEC experience, and existing Client implementations are all investigated and discussed with your team to narrow the list to just those packages which meet the needs of the organization, from both the functionality and cultural fit perspectives. By truly focusing on the needs of the organization, versus the many wants of various departments, we work to examine only those packages that will truly meet or exceed your company's information requirements.

Development of sample data

We assist your company in developing sample data sets and scheduling on-site or web-based demonstrations with each selected software provider. We work with your team and the software vendor to ensure the demonstration comprehensively illustrates how the application will perform with your company's information, process structure, and trading partners. We will help your team determine which tools and functionalities are most valuable and those that will not apply to your environment.

Interviewing potential providers

As requested, we will actively participate in all software demonstrations, site visits, and follow-up discussions with software vendors and your internal team. Our experience aids your company in evaluating each software package based on a wide variety of factors such as functionality, total implemented cost, hardware and infrastructure requirements, ease of implementation, level of provided service and support, and strength and reputation of the provider.

Negotiation and selection

To complete the project, IMEC will walk with your team through the review and negotiation of the purchase agreement. Our expertise and past experience in many similar projects provides your team an alternate and unbiased perspective when evaluating the applicability of the software tools offered and the comprehensiveness of proposed services plan.

Working with IMEC

IMEC's approach to Manufacturing Information System Optimization is designed to provide your company with as much or as little assistance as you feel is necessary. After completing the first step in the process –Evaluation and Selection – some companies will be comfortable proceeding through the next phases of the process, Business Process Mapping and Implementation, with little or no follow-on assistance. Others feel more confident pairing their internal team with the objective, unbiased assistance of IMEC. We can help your team sort through the maze of software claims and capabilities, and guide them through the final stages of the process.

Business Process Optimization – Administrative Value Stream Mapping

Typically, Manufacturing Information System Optimization is a combination of enhancements to both the processes and tools. Selecting an optimal manufacturing information system is half of the challenge. Implementing the new system with effective, efficient processes in order to achieve overall optimization is where your company and staff will realize the full value of your selection. By fully mapping and optimizing your company's administrative processes, prior to implementation, we are providing a solid foundation for the new system as well as for future growth.

Software Implementation

Implementing the selected manufacturing information system presents companies with unique challenges and demands beyond their typical daily activities. Implementation is the final step in IMEC's approach to Manufacturing Information System Optimization. IMEC will assist your company with locating, qualifying and scheduling implementation service providers as well as matching your company with the training and data conversion services necessary for a successful implementation. Depending on your company's individual needs and staffing levels, IMEC has the resources to be an active members of your implementation team, bringing our experience and expertise to work with your staff, the system vendor and implementation service provider to maintain a timely implementation schedule.



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